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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,111	01/25/2005	Franck Abelard	PF020097	2145
24498 7590 11/18/2010				
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Princeton, NJ 08543-5312				
EXAMINER				
JONES, HEATHER RAE				
ART UNIT		PAPER NUMBER		
2481				
MAIL DATE		DELIVERY MODE		
11/18/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,111

Applicant(s)

ABELARD ET AL.

Examiner

HEATHER R. JONES

Art Unit

2481

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 10-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 9, 2010 has been entered.

Response to Arguments

2. Applicant's arguments filed September 9, 2010 have been fully considered but they are not persuasive.

The Applicant argues that Parry et al. in view of Key et al. fail to disclose reserving new resources for said file, and said deallocation and reserving of new resources keeping constant the size of said file to said predetermined quantity of reserved resources. The Examiner respectfully disagrees. Parry et al. discloses a circular buffer wherein the quantity of resources are all allocated and deallocated used resources in order to keep constant the size of the file (col. 7, line 60 - col. 8, line 16 - by not completely filling up the buffer parts of the buffer would need to be allocated and deallocated for storing the file; col. 8, lines 1-3 – the buffer always has a fixed maximum time quantum of data available for reading, thereby keeping constant the size of the file). Circular buffers are fixed

storage devices and the pointers (150 and 152) are kept at a constant distant from one another all while deallocating and reserving new portions of the circular buffer as the two pointers (150 and 152) rotate around the circular buffer. Furthermore, Key et al. discloses a method of buffering digital video data, comprising: allocations being based on resources already used and that the quantity of storage deallocated in the file is based on the size of the file and on a delay between the read and write pointer (Figs. 4-6; col. 6, line 20 – col. 8, line 39). Therefore, Parry et al. in view of Key et al. meet the claimed limitations and the rejection is maintained. However, the Examiner suggests claiming that the reserved resources may be anywhere on the recording medium as indicated in the arguments on page 6, line 27 of the Applicant's arguments in order to overcome a circular buffer.

35 USC § 101

3. Method claims 1-3, 10-24, and 26-28 are considered to be statutory because a human could not perform the functions of reserving, writing, reading, and deallocating locations of a buffer without the aid of a machine. Apparatus claim 25 is considered to be statutory because the specification does not indicate that this apparatus can be implemented solely using software.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 10-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parry et al. (U.S. Patent 6,535,920) in view of Key et al. (U.S. Patent 6,892,285).

Regarding claim 1, Parry et al. discloses a method of delayed reading of digital video data stored in a file on a recording medium, comprising: reserving, on a recording medium, a predetermined quantity of resources to said file intended for delayed reading of data (col. 7, line 60 - col. 8, line 16 - by not completely filling up the buffer parts of the buffer would need to be allocated and deallocated for storing the file); writing said data of said file in said resources, a write pointer indicating the write position, said writing comprises using said reserved resources on the recording medium (Fig. 6 – reference character “150”); reading said data of said file in said resources, a read pointer indicating the read position (Fig. 6 – reference character “152”); and further to a writing of data of said file in said resources, when all reserved resources are allocated, deallocating at the beginning of the file, a predetermined quantity of storage, said deallocated predetermined quantity of resources being the cells of the files written the first, reserving new resources for said file (col. 7, line 60 - col. 8, line 16 - by not completely filling up the buffer parts of the buffer would need to be

allocated and deallocated for storing the file), said deallocation and reserving of new resources keeping constant the size of the file to said predetermined quantity of reserved resources (col. 7, line 60 - col. 8, line 16 - by not completely filling up the buffer parts of the buffer would need to be allocated and deallocated for storing the file; col. 8, lines 1-3 – the buffer always has a fixed maximum time quantum of data available for reading, thereby keeping constant the size of the file). Parry et al. fails to explicitly disclose allocations are based on resources already used and that the quantity of storage deallocated in the file is based on the size of the file and on a delay between the read and write pointer.

Referring to the Key et al., Key et al. discloses a method of buffering digital video data, comprising: allocations being based on resources already used and that the quantity of storage deallocated in the file is based on the size of the file and on a delay between the read and write pointer (Figs. 4-6; col. 6, line 20 – col. 8, line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have based the allocations on the resources already used and deallocated parts of the buffer based on the size of the file and on a delay between the read and write pointer as disclosed by Key et al. in the method disclosed by Parry et al. in order to optimize the performance of the buffer by maximizing the amount of storage being stored in the buffer without completely filling up the buffer.

Regarding claim 2, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 1 including that the data being stored continuously on the recording medium, a reading window is defined for these data such that stored data can be read only during a specified lag following their storage (Parry et al.: Figs. 5, 6, and 10; col. 16, lines 4-18 – the circular buffer provides a fixed quantity of storage of only 5 minutes, 30 minutes, or an hour, col. 10, lines 36-48 – the read and write pointers rotate around the circular buffer therefore providing a sliding window).

Regarding claim 3, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 1 Including that the resources of the recording medium being managed by a file controller allotting resources by means of cells, characterized in that a fixed quantity of cells delimited by a start of file cell and by an end of file cell is associated with the file for storing these data (Parry et al.: Figs. 8, 10, and 12 – head and tail cells mark the fixed storage quantity).

Regarding claim 10, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 2 including that the resources of the recording medium being managed by a file controller allotting resources by means of cells, wherein a fixed quantity of cells delimited by a start of file cell and by an end of file cell is associated with the file for storing these data (Parry et al.: Figs. 8, 10, and 12 – head and tail cells mark the fixed storage quantity).

Regarding claim **11**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 3 including that when the end of file cell is used to store data, the start of file cell is deallocated, a new end of file cell being allocated to this file (Parry et al.: col. 10, lines 36-48 - the read and write pointers rotate around the circular buffer therefore providing a sliding window while reallocating cells on the way depending where they are on the rotation).

Regarding claim **12**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 4 including that when the end of file cell is used to store data, the start of file cell is deallocated, a new end of file cell being allocated to this file (Parry et al.: col. 10, lines 36-48 - the read and write pointers rotate around the circular buffer therefore providing a sliding window while reallocating cells on the way depending where they are on the rotation).

Regarding claim **13**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 3 including that when the end of file cell is used to store data, the set of the cells that are distant from the end of file cell by a specified quantity of data is deallocated from the file and reallocated as cells consecutively following the end of file cell (Parry et al.: col. 10, lines 36-48 - the read and write pointers rotate around the circular buffer therefore providing a sliding window while reallocating cells on the way depending where they are on the rotation).

Regarding claim **14**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 10 including that when the end of file cell is used to store data, the set of the cells that are distant from the end of file cell by a specified quantity of data is deallocated from the file and reallocated as cells consecutively following the end of file cell (Parry et al.: col. 10, lines 36-48 - the read and write pointers rotate around the circular buffer therefore providing a sliding window while reallocating cells on the way depending where they are on the rotation).

Regarding claim **15**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 3 including that separate means of writing or of reading data are used (Parry et al.: Figs. 5 and 6; col. 7, lines 5-7).

Regarding claim **16**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 10 including that separate means of writing or of reading data are used (Parry et al.: Figs. 5 and 6; col. 7, lines 5-7).

Regarding claim **17**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 11 including that separate means of writing or of reading data are used (Parry et al.: Figs. 5 and 6; col. 7, lines 5-7).

Regarding claim **18**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 12 including that

separate means of writing or of reading data are used (Parry et al.: Figs. 5 and 6; col. 7, lines 5-7).

Regarding claim **19**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 13 including that separate means of writing or of reading data are used (Parry et al.: Figs. 5 and 6; col. 7, lines 5-7).

Regarding claim **20**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 14 including that separate means of writing or of reading data are used (Parry et al.: Figs. 5 and 6; col. 7, lines 5-7).

Regarding claim **21**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 15 including that the means of reading or of writing comprising, respectively, write or read pointers wherein the write pointer precedes the read pointer for every cell of a file (Parry et al.: col. 9, lines 23-34).

Regarding claim **22**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 16 including that the means of reading or of writing comprising, respectively, write or read pointers wherein the write pointer precedes the read pointer for every cell of a file (Parry et al.: col. 9, lines 23-34).

Regarding claim **23**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 17 including that the

means of reading or of writing comprising, respectively, write or read pointers wherein the write pointer precedes the read pointer for every cell of a file (Parry et al.: col. 9, lines 23-34).

Regarding claim **24**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 20 including that the means of reading or of writing comprising, respectively, write or read pointers wherein the write pointer precedes the read pointer for every cell of a file (Parry et al.: col. 9, lines 23-34).

Regarding claim **25**, Parry et al. in view of Key et al. discloses a device for delayed reading of digital video data stored on a recording medium, comprising means for allocating a fixed quantity of the storage resources of the recording medium to the file storing these data, wherein said file is a sliding window on the recording medium, the device preferably being adapted to implement a method according to claim 1 (Parry et al.: Figs. 5, 6, and 10; col. 16, lines 4-18 – the circular buffer provides a fixed quantity of storage, col. 10, lines 36-48 - the read and write pointers rotate around the circular buffer therefore providing a sliding window).

Regarding claim **26**, Parry et al. in view of Key et al. discloses a computer readable medium encoded with a computer program, the program for performing the method of delayed reading of digital video data according to claim 1, when the said program is executed on a computer (Parry et al.: Figs. 5, 6, and 10; col. 16, lines 4-18 – the circular buffer provides a fixed quantity of storage, col. 10,

lines 36-48 - the read and write pointers rotate around the circular buffer therefore providing a sliding window, col. 3, lines 13-38 - the program).

Regarding claim **27**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 1 including that the deallocating at the beginning of file, a predetermined quantity of resources depending on the size of the file and on a delay between said read and write pointer is performed when said write pointer reaches the end of file (Parry et al.: col. 7, line 60 - col. 8, line 16 - by not completely filling up the buffer parts of the buffer would need to be allocated and deallocated for storing the file – since the buffer is a circular buffer and once the write pointer reaches the end of its file more space needs to be allocated and deallocated to continue recording and to maintain the fact that the buffer never fills up).

Regarding claim **28**, Parry et al. in view of Key et al. discloses all the limitations as previously discussed with respect to claim 1 including that the deallocating at the beginning of file, a predetermined quantity of resources depending on the size of the file and on a delay between said read and write pointer is performed before each write access in said file (Parry et al.: col. 7, line 60 - col. 8, line 16 - by not completely filling up the buffer parts of the buffer would need to be allocated and deallocated for storing the file – since the buffer is a circular buffer and once the write pointer reaches the end of its file more space needs to be allocated and deallocated to continue recording and to maintain the fact that the buffer never fills up).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2481

HRJ

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November 6, 2010

/Peter-Anthony Pappas/

Supervisory Patent Examiner, Art Unit 2481